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CONTINUATION of the DESCRIPTION
of the
COAST of MALABAR,

From *Bancoot*, downwards,

by
John M^cCluer,

1789 and 1790.

Published at the Charge of the East India Company,

by
Dalrymple.

1791.

L O N D O N,

Printed by GEORGE BIGG, 1791,

CONTINUATION OF THE DESCRIPTION

OF THE

COAST OF MALABAR

FROM BANGALORE TO KANNIYUR

BY J. M. GUNN

1870

PRINTED BY THE GOVERNMENT OF INDIA

AT

THE

GOVERNMENT OF INDIA

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DESCRIPTION of the COAST of MALABAR,
continued from *Bancoot*, downwards.

May 1789.

RECEIVED orders to take charge of the *Hawk*, a small Snow of 50 tons, and to have her in readiness to carry on the Survey to the Southward, also to give charge of the *Experiment* to Mr. *Procter*, who was my Assistant on the last service. Got both vessels sheathed, and coppered, taking every possible care to have them completely refitted for the service; the *Hawk* had just returned from *Prince of Wales's Island*, and was obliged to undergo a thorough alteration in rigging, masts, yards, sails, &c.

On the 5th of October.

The weather being broke up, and our vessels in order, so as to go out of the Harbour, reported them ready, and

On the 6th.

Received the Sailing Orders, with the Honourable Company's Instructions, in their letter of March 1786, for my guidance; directing me to take the *Experiment* under orders.

The 7th.

In the Evening threatened much to blow from the Land, and about 6 PM it blew very fresh, in squalls, accompanied with rain, for about an hour: This is called here, by the Natives, the *Elephanta*, or breaking up of the Monsoon; and sometimes comes with great violence.

A

P. M.

1789. October 8th.

P. M. weighed, and stood out of the Harbour, went along the Coast for *Bancoot*, to regulate our Chronometers, and put the Vessels, and our Surveying-Tackling in order.

10th.

→ in the *River*, and took Altitudes for the Time.

11th,
12th,
13th.

Went ashore every day from both Vessels, and took the Lunar distances.

The result of 51 sights is . . . 73° 8' 33" E

And by the Chronometer from BOMBAY 12. 0 E

Longitude of BOMBAY-CASTLE, East of GREENWICH 72. 56. 33

By the result of 12 sights, I make 73° 13' 22" E, which places BOMBAY in 73° 1' 22" E of GREENWICH, but I put more dependance on the other Gentlemen's Observations, than on my own, as theirs agree within 2 miles of the celebrated Capt. *Huddart*: To confirm the whole, I wished to have taken the *Immersion* of one of *Jupiter's Satellites*, but could not perceive it, for some defect in our telescope.

16th.

AM. Weighed, and stood off the *River*; made a stretch to the Westward, to examine the extent of *Soundings* in Lat. 17° 30' N; Stood out West from *Bancoot*, and made near 2° difference of Longitude by Chronometer, before we lost *Soundings* in Lat. 17° 40' N: We then stood in again, near a SE Course, till we came near the Parallel of the *Shoal*, laid down in the *old Charts*, on which is put 4 fathoms *rocky ground*, * stood directly over the supposed

* M. *D'Après*, in his first Edition, says, the *Elizabeth* had 4 fathoms rocky ground in sailing over it; but he does not mention in what year. D

supposed situation of *It*, keeping the Lead going every half hour in the night, and a man at the mast head in the day; but had no *Soundings*, neither saw any thing of *It*; and I really doubt of its existence, for want of a good authority. The *Bank* of *Soundings* here shelves in upon the *Coast*, as will appear by the *Chart*: For these five days past, had very light Winds, which occasions a slow progress in our work. Traversed in for the *Land* near the line of 17° N Latitude till well in with *It*; then up for *Zyghur* to continue the delineation of the *Coast* Southward. The *Time* & *Chronometer*, on 21st differs with the Line of the *Coast*, one mile; at present, I know not where the Error lyes: The *Land* hereabout shews in a number of *Bluff Points*, particularly *Boria*, * which is very high and steep to; There is a *small Pagoda* on the highest part of it, and within *Boria Point*, are two little *Bays*, where Merchant Boats lye sheltered from fresh NWesters.

The *Bay*, between *Boria* and *Zyghur*, is near 2 miles deep, and 6 wide, clear from danger, except close in opposite to the *Fort*; where there is a *Reef* of *Rocks*, extending about $\frac{1}{2}$ mile from the Shoar. The *Bar* of this River, is very safe for small Vessels, having $2\frac{1}{2}$ fathoms, on it, at low-water. Keep the *Fort-shoar* close on-board, and round *that Point*, the *Fort* stands upon, within a cables length.

Zyghur

* Cape *Dobbs* in the old Charts. J. M^cC.

Zyghur Fort stands upon a high Point, on SW side of the *River*, and the *Fortification* continues, down the *Hill*, to the Water-side, as in the *View*, taken in 1788. Within the *Fort-Point*, is deep water, and a safe *Harbour* for Shipping, against any Winds: The foregoing remarks I made in a *Pattimar*, in disguise: Latitude of the *Fort* $17^{\circ} 16' N$, which obliges me to alter the situation of this *Fort* in my former Chart, being 4 miles too much to the Southward.

1789. October 21st.

From *Zyghur* we coasted along to the Southward within a mile, and in some places less, of the shoar; had regular *Soundings* from 9 to 7 fathoms, all along to *Rattney Garie*.

Rattney Garie Fort is situated in Latitude $17^{\circ} 2' N$, it appears, in the offing, like an *Island*, but it is only so at high water; This Neck of Land is fortified all over, and at some distance from the Land, it appears like 2 seperate *Islands*; the smallest part to the Northward round, and covered with Coconut-trees; the Southern part, flat and level. The *Bunder* or *Landing-place*, is on the North side, and seems to be a Place of shelter from the SW Monsoon.

To the Northward of *Rattney Garie*, is a Cape, or projecting Head Land, which makes like an *Island*, coming from the Northward or Southward; even from the Westward, it shews different in colour from the other Land, being much lighter. Behind this Cape, to the Northward,

Northward, is an excellent *Bay*, and *shelter* from Southerly Winds; We stood a little way into it, and could see the extent, apparently clear from danger: Between this *Cape*, and *Rattney Garie*, is a *Bay* about $1\frac{1}{2}$ mile broad, and 2 miles deep, the bottom is sandy; We stood into it, till all the extreme Points of the Land were shut in, and had 6 fathoms: The *Experiment* went about $1\frac{1}{2}$ mile within us, and had 5 fathoms: They fired several shot at us from the *Fort*, and from a *Battery* at the *Bunder*, which prevented our traversing the whole of the *Bay*: The *Hill*, on which this *Fort* stands, is separated from the *Main*, only at high water. We stood close in with the *Fort*, on the SW side, but could not meet with the *Shoal* in 7 fathoms, mentioned by Mr. *Herbert*: To the Southward of the *Fort*, is a wide *Bay*, as in the Chart; and we could see the *Entrance* of a *River*, with a few boats lying within the Bar: on the North side of the *River*, is a small round *Tower*, which stands upon the brow of a *Hill*, and by the direction of this *Hill*, the *River* must curve to the SE. Off the South Extreme of the *Bay*, lyes a *patch* of rocks above water, about $\frac{1}{2}$ mile distant from the shoar; The Coast here is very bold; we were sometimes within $\frac{3}{4}$ mile of the shoar, and had regular Soundings, 8 or 9 fathoms mud.

Rattney Garie River.

Eight miles to the Southward is a small *Bay*, into which we stood close, but could see no houses, or any appearance of cultivation; Between *Rattney Garie*, and this *Bay* is a remarkable large *Banyan-tree*, on the brow of one of the *Hills* near the Sea.

From

From this Bay we coasted along, within one mile of the shoar, to the *Fort Radjapour*, which I place in Latitude $16^{\circ} 45' N$. This *Fort* stands upon a barren *Hill*, at the North side of a *River*, which trends to NEward, and on the South side stands a remarkable *white Pagoda*, low on the *River* side; The *Hills*, on the South of the *River*, are very woody: We stood along shoar, from this, within $1'$, taking angles of the projecting Points. Half past five took Altitudes for the Time, found they differed one mile from the bearings by Azimuth Compass; Set *Gariah Flag-Staff*, and the adjacent Points: stood off the Land with a determination to traverse *Angria's Bank*. Our Chronometer differing from the Bearings, we suspect it has altered its rate, which we cannot at present justly ascertain. *

Angria's Bank.

From the Latitude $16^{\circ} 40' N$, stood off nearly a W: S Course, and sounded regularly every hour, till Soundings were lost, which is 66 miles from the Land: Fell in with *Angria's Bank*, first cast 13 fathoms, Stood across due West, and found its breadth here to be about 10 miles; Upon this *Bank*, we had so variable light winds, that the examination of it was a tedious job: We crossed It in Latitude $16^{\circ} 30' N$, and endeavoured to traverse to the North end of it, but the Winds, and irregularities of the Currents kept us three days in the same Latitude: We found the *Bank* did not exceed $16^{\circ} 38' N$, by crossing the head of it in that Latitude; From This we made close traverses, Southward, with a fair wind.

Stood

* This difference, $1' = 4''$ in 8 days, indicates that Lieutenant *M^cCluer* had unreasonable expectations of his Chronometer. D

Stood to the Westward of this *Bank*,^a in Lat. $16^{\circ} 18' N$, to search for the *other Bank*, which is said to exist, but could not find any *Soundings*, though we kept the Deep-sea-lead going between both vessels every half hour. Came in with the Land in the parallel of *Goa*; \rightarrow off the *Aguada*, took a set of distances of the \odot and ϵ , and filled up our *water*: Stood up the Coast again, as far as from where we set off, to ascertain the rate of our Chronometers, and examine the *Coast* in that Space: Found the Latitude of the *Aguada Fort* to be $15^{\circ} 29' 20'' N$, by the mean of four capital instruments: From the *Aguada*, we coasted along within $1\frac{1}{2}$ mile of the shoar, in regular *Soundings*.

Chapra Fort.

VI In Latitude $15^{\circ} 36' N$ is the Fort of *Chapra*, situated on a high bluff Point, to the Northward of which is a small *River*; The Land hereabout is hilly to seaward.

Chiracole Fort.

Chiracole Fort is in Latitude $15^{\circ} 41' N$, and stands on the brow of a hill, at the North side of a small *Inlet*; This and *Chapra* belong to the *Portuguese*, who seldom shew any colours at these *Forts*: *Chiracole* does not shew itself at any distance in the offing, being situated on the side of a hill; nearly in its center.

Rary Fort.

In Latitude $15^{\circ} 44' N$ is situated *Rary Fort*, apparently a regular, well built, fortification, standing on an Eminence, which shews itself to an advantage from the Sea;
C To

^a Some MS *Soundings* describe a *Bank* from $12\frac{1}{2}$ fath. in Lat. $16^{\circ} 27' N$ to $17\frac{1}{2}$ in Lat. $16^{\circ} 51' N$, which do not correspond with Lieut *McCluer's* Description of *Angria's Bank*: Commodore *Watson's Directory* had also, in MS, a large *Bank*, called the *Gariab Bank*, extending from $16^{\circ} N$ to $17^{\circ} 30' N$, which was described to have "on some places only 4 fathoms, and on some places 15 and 20 sand and coral rocks." This includes the *Elizabeth Bank*. *D*

To the Westward of this Fort, is a *rocky Point*, with many *rocks above water*; two in particular, lye to the SW of it, above a mile from the shoar: These *rocks* are in the line of 7 fathoms, and it is here necessary not to come under 10 fathoms in the night; To the Northward of *Rary*, is a small *River*, and we could see several Boats of a considerable size, repairing on the beach, and others covered up with the coconut-leaf.

Newtee Point.

From *Rary* to *Newtee Point*, is a regular sandy beach, and good *Soundings*, all the way, within a mile of the Coast.

Burnt Islands.

Newtee Fort, is what is taken, by most people, for *Vingorla*. It stands in $15^{\circ} 56' N$ Latitude, to the SW of which, is the *South Range* of the *Barren*, or *Burnt Islands*,* having a good channel between Them, and the Point; with good \leftrightarrow ground for Vessels working up the Coast: The *Southern Range*, of the *Burnt Islands*, appears to be chained together by a *Reef*: There are above *Twenty* in sight, several of which are just *a-wash* at *high water*: They lye nearly in a North and South Direction.

Melundy or Malwan.

In Latitude $16^{\circ} 2' 30'' N$ stand the *Island* and *Fort* of *Melundy*, to the Southward of which are a number of *Rocks above water*; To the Westward of the *Fort*, lyes a *Sand Bank*, in the line of 10 fathoms: We were standing along shoar, and from 10 fathoms *mud*, we had 6 fathoms *sand*; then 10 fathoms *mud* again: This *Bank* is not more than $\frac{1}{4}$ mile broad.

Melundy

* By English Navigators commonly called the *Vingorla Rocks*. *A*

Melundy is also called *Malwan*, and the People about here, are named *Malwans*, who are nearly of the same principle as those of *Collabah*;* for they will plunder any small Vessel which may be defenceless: Their force consists in a few large *Gallivats*, with one sail.

Melundy Island.

This *Fort* cannot be perceived at any great distance from the *Coast*, and the *Island* can only be distinguished coming from the Northward or Southward, as it lyes close to the shoar.

About 3 miles to the Northward of *Melundy*, is a small rocky *Island*, lying about a mile from the Main; It affords no shelter for anchorage, being chained to the *Coast* by rocky irregular ground; Our boat founded all round it, but found nothing worthy of notice; The *Channel*, between the *Rock* and the *Main*, is only navigable for boats.

From this *Island*, Northward, is a straight sandy beach, clear of danger into 5 fathoms, which is one mile off.

Atchera River.

In Latitude $16^{\circ} 11'$ N is the Entrance of *Atchera River*; the Land on the North Side is higher than the South Side, and It may be known by a remarkable *White Pagoda* on the South Side: This *River* is navigable for small vessels; our boat founded the *Entrance*, and *Bar*, $1\frac{1}{4}$ fathom least water in the *Channel*; We observed their Boats, when they went in, hauled close round the *North Point*, which would seem to have the deepest water.

From

* Called *Coulaba* in the former Description, from the French Plan, Lieut. McCluer, in the *List of Latitudes and Longitudes* calls it *Coullaba*. *D*

From *Atchera*, to *Dughur*, the *Coast* is clear of danger, and regular *Soundings* within a mile of the shoar.

Dughur.

Dughur Fort lyes in Latitude $16^{\circ} 23' N$, on a *high hill*, at the Southern Entrance of a beautiful *River*, which, the People say, runs above 100 miles up the Country; There is no apparent *Bar* to this *River*, and, by keeping the Southern Shoar on-board, you have regular *Soundings*, 4 or 5 fathoms, into the back of the *Point*, and within the Fort, there is the appearance of an excellent Harbour, but I had not an opportunity to examine the depth of water. By what I could see, and learn from the People, this *Fort* stands upon an *Island*, being separated by a small *Inlet*, as in the Chart: From the North Point of the *River*, a dangerous *rocky reef*, runs off in a SW direction; therefore, coming from the Northward, do not stand under 7 fathoms till the *River* is *entirely open*, then stand for the Southern Point; We had no less than 4 fathoms all the way, from the Fort, to where we \rightarrow .

Caution for the River.

From *Dughur* to *Gariah*, the *Coast* is steep to; 8 or 9 fathoms within $\frac{1}{2}$ mile of It, and quite clear of danger.

Gariah.

The *Plan* of *Gariah* is so accurately done by Sir *William Hewett*, that It requires no further Description; and the Latitude of the *Fort*, is exactly the same by him, and us, with four of *Ramsden's Sextants*: The Land to the Northward of *Gariah*, is high, and forms several Points to Seaward.

Returned

Returned to the same situation by bearings, as we were in the Evening we stood off for the *Angrian Bank*: after taking the Time, to determine the rate of our Chronometer, stood directly for *Goa* again; and by the run of one day, and the difference of one day's Time, the difference of Longitude in this Space is confirmed; viz. from $16^{\circ} 42' N$, to the *Aguada* Point.

Took Lunar observations, at \rightarrow in *Goa Roads*, which correspond with those, taken at *Bancoot*, to a great nicety, viz.

In *Goa Roads*, within $\frac{1}{4}$ mile of the *Aguada* Flag-Staff, Longitude \rightarrow

Arnold's Chronometer $^{\circ} 43.47''$ E. of *Bancoot*.

Bancoot's Longitude $73. 8.33$ E. of Greenwich

Present Longitude $73. 52.20$ E. of Ditto

By diff. \odot and ζ $73. 50.53$ E. of Ditto

1.27 Difference.

In the Chart we have placed the *Aguada*, by the Observations at *Bancoot*, and difference by Chronometer.


From the *Aguada* \rightarrow ground, we stood round the *Monastery Reef*, and, the Wind being from the Land, traversed between the *Outer St. George's Island*, and the *Main*, but had chiefly hard ground in that *Channel*, and found it very unsafe for large ships, as there are several detached rocks from the *Outer Island*, one, in particular, is just covered at high water; About a quarter of mile to SE of the *Outer Island*, is a *Channel* between *Them*, with 8 or 9 fathoms water: To the Eastward of *These*
D Islands,

Islands, is an excellent *Bight*, where Ships may ride out a hard NWester, the bottom is clear and regular, to within half a mile of the shoar.

Salfet Island.

From *Marmagan Point* to within 3 miles of *Cape Ramas*, is *Salfet Island*; to Seaward is a straight regular sandy beach, clear bottom, to within a mile of the shoar, The *Inlet*, which forms this *Island*, has a *Bar* to It, with 8 or 9 feet water in the *Channel*, at half tide; By the report of the officer who examined it, it forms two branches, one to the NE, the other to the SE: This *Island* is low, and apparently well cultivated; Several *Portugese Churches* are to be seen from Seaward.

Cape Ramas.

Cape Ramas, is the Southern Extremity of the *Portugese Districts*; on the Western Point, is a small *Fort* belonging to them: This bluff is very steep to; we rounded it, at the distance of $\frac{1}{4}$ mile, in 9 fathoms soft ground; here is good shelter, against Northerly Winds, for ships working up the *Coast*: This *Cape* is very remarkable, forming from the Northward and Southward thus  so that the *False Cape*, is always seen before the *True Cape*.

From *Cape Ramas* to *Carwar Bay*, the *Coast-Line* is curving; forming several *Bays*, but not of any consideration, as they will not afford shelter for shipping.

Carwar Bay.

In *Carwar Bay*, I made several traverses, and fixt all the *Points*, and *Islands* by transient Bearings; but as we

we were not upon friendly terms with Tippo, I could not examine it to my wish: ^a The bottom where we went, was found clear, and good anchorage; Within those *Rocks*, a ship may ride safe, against a Southerly Wind. ^b

Anjedivé Island.

Anjedivé Island, lies 23' East of the *Aguada Point*. The *Channel* between *It*, and the *Main*, is clear of danger; such danger as there may be, being in sight; There is hard ground off the NE *Point* of the *Island*, which is not dangerous, only injurious to your cable; This *Spot* does not extend above $\frac{1}{4}$ a quarter of a mile from the *Island*, the best \rightarrow ground is where we lay, bearings thus:

The North Extreme of the <i>Island</i>	S 65° 30' W.
South Point . . . Ditto . . .	L. 83°
Off the <i>Island</i> nearly one mile.	

The *Island* is fortified towards the *Main*, by a few *Towers*, irregularly divided by a Wall, something in the *Indian manner*; The Garrison consists of poor half-starved Wretches, who are transported from *Goa*: It is about a mile in length, but not so broad, having an agreeable appearance

^a In 1789 or 1790, I saw a MS Plan of *Carwar Bay*, &c. it belonged to Lieutenant *Lawrance* of the *Bombay Establishment*; if any Person will favor me with this *Plan*, it will be very acceptable, and shall be immediately engraved for Public Information. *A*

^b On the South part of the *Bay* is a *Cove* where, it is said, a Man-of-War hove down in antient times. *A*

appearance from the inside, and very much the contrary from the Sea: The *Passage within it*, is clear; either to the Northward or Southward.

I must leave this part of the Coast from *Anjedivé* to *Mount Dilla*, [being subject to *Tippo*] till a more favourable opportunity.

Tellicherry.

From *Goa* to *Mount Dilla*, our Chronometer gives $1^{\circ} 39'$; which places it in $75^{\circ} 31' 20''$ E Longitude from *Greenwich*: *Tellicherry Fort* is $18'$ more Easterly, or $1^{\circ} 57'$ E of *Goa*, which gives Longitude $75^{\circ} 49'$ E of *Greenwich*.

By the mean of 15 sights, I make . . . $75^{\circ} 48' 45''$ E

D^o . . . of 24 d^o Mr. Wedgebrough $75^{\circ} 36' 14''$ E

$75^{\circ} 42' 29''$

The Chronometer placed *Tellicherry* . . . $75^{\circ} 49'$. . . E

The Latitude of *Tellicherry*, we found erroneously down in the old *Charts*; by a Series of Observations on board, we make the *Fort* to lye in $11^{\circ} 44'$ N, but by our observations on shoar, we make $11^{\circ} 42' 30''$ N; I have placed it by the former, as the Sea Observations for Latitude are what Navigators chiefly go by: Few men will take the trouble to come on shoar to take an Observation, when he has a clear horizon on board, although the artificial horizon has so much the advantage of the natural one.

The Coast from *Mount Dilla* to *Tellicherry*, is clear of danger in 5 fathoms, and a ship might coast along in that depth with safety.

The

The *Coast* from *Tellicherry* to *Cochin*, we had not an opportunity to examine, for the same reasons as what we left unexamined the space above *Mount Dilla*, [being under *Tippo's* Dominion].

Cochin and River.

From the $\phi \rightarrow$ at *Tellicherry*, to that at *Cochin*, we make 43.' 40" difference of Longitude, and as the *Fort* of *Cochin* is about 1½ mile East of the $\phi \rightarrow$, we make it to lye in Longitude 76° 33' E of *Greenwich*, and Latitude 9° 56.' 31" N.

The *Bar* of *Cochin* is navigable for ships drawing 14 or 15 feet water; the *Channel in*, is, to keep close to the *Northern Shoar*, and *breakers*; steering direct for the *Portuguese Church*, which stands on the North Side of the *River*; There is seldom more than 6 feet difference in the *rise* and *fall* of the *tides* here: The *Ebb* upon the *Bar* is very *strong*, and runs longer than the *flood*, so it is uncommon for any vessel to get over the *Bar*, but with a sea wind.

Iviker Inlet.

From *Cochin*, we coasted along to *Quiloan*, within a mile of the shoar; had regular *Soundings*, and soft bottom, till we came off the *Entrance* of *Iviker River*, or *Inlet*, which communicates with *Cochin River*; This *River* lyes 3 miles to the Northward of *Quiloan*, and we thought it might be navigable for any of our cruizers; Made a particular Examination of the *Bar*, and *Entrance*; found them, navigable *only* for the Country-Boats, (*Munchoos*) which are flat in the bottom: We had
E only

Bar. only 5 or 6 feet on the *Bar*, at high water. On the Outside of the *Bar* is a *Swatch* of *soft ground*,* with 3 fathoms water on it; and without *It*, is a red gravelly bottom, out to 9 fathoms, and runs below *Quiloan*, as in the Chart.

Quiloan Point. *Quiloan Flag-Staff*, lyes in Latitude $8^{\circ} 51' 30''$ N, and $N 44^{\circ} W$ from *Anjengo*: It is not safe to approach the *Point* nearer than 12 fathoms; for under that depth, there are *overfalls*, and *hard ground*; upon which you come suddenly from 9 to 4 or 3 fathoms.

Quiloan to Anjengo. From three miles Southward of *Quiloan*, the *Coast* is clear, down to *Anjengo*; and 10 or 9 fathoms is a good depth to keep in, being then $1\frac{1}{2}$ or 2 miles from the shoar.

Anjengo. At *Anjengo* we took several sets of Lunar Observations, and make the place to lye considerably to the Eastward of former Accounts. By our Chronometer, reduced from the observations to the Northward, we place *Anjengo* in $77^{\circ} 6' E$ of Greenwich. The mean of all our distances of \odot and D , corresponds with this to a great nicety, viz.

Longitude.	Mr. McCluer	.	.	.	.	$77^{\circ} 07'$
	Mr. Procter	.	.	.	.	$77. 25. 15$
	Mr. Wedgebrough	.	.	.	.	$76. 51. 22$
	Mr. White	.	.	.	.	$76. 45. 15$
<hr/>						
Mean Long.						$77. 2. 13 E$ of Greenwich.

The

* This seems to be what is sometimes called The Southern *Mud-Bank*. *D*

Latitude. The Latitude we took upon the beach, 200 yards to the Northward of the *Fort*, and the four instruments did not differ 5" in Altitude: Latitude $8^{\circ} 39' 20''$ N.

It is rather a difficult matter, for a stranger to distinguish *Anjengo*, from any considerable distance off shoar; the Land to Seaward being low and woody: In clear weather, there is a good mark, by which the land here may be known; About 8 leagues within *Anjengo*, is a very remarkable *Peak*, higher than any of the back-land; which, when it is in one with the *Fort*, bears $E 4^{\circ} \frac{1}{2} S$; This *Peak* is perceivable to the Southward of Cape *Comorin*, and may be a guide to a ship, along the *Coast*, till past *Quiloan*. The anchoring ground off *Anjengo*, under 10 fathoms is *sandy*, but above that depth, you have *mud*; It is best to \rightarrow with the *Fort* bearing ENE, or NEbE, on account of the fresh Sea-Winds, which very much retard the progress of the *tonies*, going to vessels which lye more Northerly.

A Peak over Anjengo.

The *Bank of Soundings* from *Anjengo* to *Cochin*, extends from 9 to 10 leagues off shoar.

From *Anjengo*, the two Vessels stood off in a WSW direction to search for the *English Rock*; Traversed, and drifted about with the Current, in light variable winds, for 7 days; keeping the Lead in motion every hour, and the Vessels spread asunder, in the day time, with People at the mast-heads; but could not see any thing of the kind.

The *Arrows* in the *Chart*, denote the set of the Currents, and the *length* of *them* * points out the *distance* set each day:

* This is a very excellent method, and, so far as I know, Lieut. *McCluer* has the merit of it. *D*

day: Not finding this *Rock*, we stood again for *Anjengo*, to know if our watches had made any alteration in rates. —Vide Time Book. ^a From *Anjengo* we stood to the *Extent of Soundings*; then traversed Northward above *Cochin*; from where, we stood off for the *Laccadivé Islands*.

January 31st.
Island Kalpeny,
one of the Laccadives.

Made the *Island Kalpeny*, and employed ourselves 4 days in circumnavigating it; found the West Side defended by an extensive *Reef*, breaking very high in many parts; the *Rocks above-water*: From the North Extremity, we stood along the *Reef*, close to the *breakers*, in the *Pattimar-Boat*; had *no soundings* till close to the *surge*; and the only *Passage*, we could find, through, was a *narrow opening* in the *Reefs*, with only $1\frac{1}{2}$ or 2 fathoms in the *Channel*: We stood above a mile within the *Reef*, and had from 3 to 4 fathoms, all *coral rocks*; Where their boats lye, is about South from this Opening. There are *Four Islands* in *this cluster*; *two* to the Westward, and *one* to the Northward of the *large One*. The *large Island* is well planted with Coconut-trees; for particulars I refer to the *Plan*, which I will vouch is an exact shape of the *Island*: The length is determined by a *base-line*, in the run of an hour and a half, corresponding with the observations, taken for the Latitude at both Extremities. I make the *Center* of the *Cluster* to lye in $10^{\circ} 7' N$ Latitude, and $3^{\circ} 7' W$ of *Anjengo Fort*.^b

Its situation.

The

^a By the Time-Book it appears the *Rate* of the *Chronometer*, before leaving *Anjengo* 10th January, was gaining $38\frac{1}{4}''$ day; on their return the 17th, The *Rate* was gaining $36\frac{6}{7}''$ day. Their *Error* by the *Land* was by the latter rate, not half a mile: The daily difference of *Two Chronometers* was on the 10th $17\frac{1}{2}''$; 11th $18\frac{1}{2}''$; 12th $16\frac{1}{2}''$; 13th $18''$; 14th $16''$; 15th $15\frac{1}{2}''$; 16th $17''$; and on the 17th $17\frac{1}{2}''$; so that there does not appear to have been any considerable *Error* at any particular time. *D*

^b In 1776 I made It $3^{\circ} 4' W$ by another *Chronometer* of *Arnold* from *Anjengo*. *D*

Traverse for Malique.

From *Kalpeny*, we stood Southward to traverse for the supposed *Island Malique*, which we did not find; and I am informed by those *Islanders*, whom I have seen, that there is *no Island* in that position.

Minicoy.

Made the *Island Minicoy*, called by mistake in the Charts, *Kelay*; *Minicoy*, somewhat resembles the former *Island*, having a large *Reef* on the NW side, we failed round *It*; in many places, at the distance of 200 yards from the beach: Seeing a great *Snow*, lying at the *North End* of the *Island*, we sent the *Pattimar* to examine the *Channel* in, and on what ground she cast her \leftrightarrow ; Found the *passage* in, at the *North End*; ^a it was very intricate, and narrow, and 2 fathoms was the deepest water on the *Reef*, with an increase where the *Snow* lay, and within her; but the bottom was *hard Coral*, which nothing but chains could stand, was there any swell; This *Reef* forms a kind of *Harbour*, and all their Craft lye close to the beach, and many upon it: The People appeared very civil to the Officer who went in the boat, and offered any thing their *Island* afforded, if we would come in: The *Island* is very populous, and well planted with *Coconut-trees*; *It* is the only One of the *Laccadivés* where

^a The *Opening* through the *Reef* observed by Lieut. *Blair* (vide his *Plan*) was not taken notice of by Lieut. *McCluer*. *D*

where they catch the delicious fish, called by the natives *Coomelmutch*, highly esteemed among the *Malabars*.

These Islands are all very low, and *Minicoy* could not have been more than 10 miles off, when we first made it; The *Center* of the *Island* lyes in about $8^{\circ} 17' N$, and $3^{\circ} 42' W$ of *Anjengo*. For particulars vide *Plan*.

Not being able to get a supply of provisions and water at *Minicoy*, stood for *Tellicherry*, traversing the *Bank of Soundings* as Ψ Chart: In about $10^{\circ} 30' N$, the *Bank* is remarkably steep to, as Ψ log of 14th February, 1790.

Traverses for Eliculpena
Bank.

From *Tellicherry* we stood to the Westward, and made several traverses for *Eliculpena*, placed in the old Charts; but to no purpose; although the lead was constantly going, between both vessels.

March 5th.
Underoot.

Made the *Island Underoot*, so called by the *Inhabitants*, and in the old Charts, *Aquiloan*; From the North side, we found an extensive *Bank of Soundings*, chiefly coral bottom: Made a *Survey* of the *Island* and *Bank*, as Ψ Chart, also formed an intercourse and friendship with the *Natives*, who at first seemed rather shy and afraid, but our presents and civilities soon reconciled them to us. As I wished much to see what state their *Islands* were in, I begged to be admitted on-shoar, which they readily consented to, not thinking I was in earnest; The next morning, attended by Mr. *Wedgebrough*, in the *pattimar*, which had a few *sepoys*, I went, but before we got near the

Transactions there.

the shoar, the *Second* of the *Island* came off to us, and begged we would not think of landing, as such a step was contrary to the orders of the *Bibee* of *Cannanore*, to whom the *Laccadives* belonged: I remonstrated much in the Moor language; at last, prevailed on him to let us two come, unattended: On landing we were graciously received by the *Head-man*, called a *Karia-Kar*, the same meaning as *Governor*: He seated us under a *Grove* of *Coconut-trees*, and made his People, who gathered round us, go up and bring some of the Nuts down, which were opened, and given us to drink: We told him our business, and that we meant no harm to his *Island*; which, with his permission, we walked about, after having sat about $\frac{1}{4}$ of an hour. Their *houses* are dispersed along the North Side of the *Island*, and they have several *pieces* of *ground* sunk down 4 or 5 feet from the *Surface* of the *Island*, in which they rear a *few* *Greens*, and *Plaintain-trees*; They have a few *Cows*, in bad order; also some *tame fowls*, a few of which they spared us: During our stay at the *Island*, the People filled up the *pattimar's* water, at our request, and cut us two small boats of *fire-wood*. *Underoot* is safe from invasion, for *It* is defended by Nature, having *coral rocks* all round; through which, there is only a *small channel*, and here their small boats pass: This *Island* did not appear to be so well inhabited, as those southerly; The People seem to be an inoffensive set, for I saw no arms among them, excepting that each Man had a small knife; I made the *Head man* a present of a *Sword*, but He told me a *bag* of *rice* would be more acceptable: The Place affords nothing of any value, except *Coconuts*, and the

Houses and Ground with
Produce.

the whole employment of the Inhabitants, Men, Women, and Children, is to convert the *fibres* of the *husk* into a *yarn*, which is taken away as fast as it is made, by Boats from *Cannanore*; in return they get a little *rice*; nor dare they dispose of any of their commodity to Strangers.

Underoot's situation.

We made these People very well satisfied for their attention to us; we got several fine *turtle*, which they can take up any time of the day; The *water* of this *Island* is tolerable good: Its *Center* lyes in Latitude $10^{\circ} 49' 30''$ N, and $1^{\circ} 05'$ W of *Tellicherry*.

Another Traverse for Eliculpena.

The People of *Underoot* gave us an account of *Eliculpena*; that *It* bore about NE of their *Island*, and that their boats frequently crossed it, in going and coming from *Cannanore*: In consequence of this information we made another traverse to the *Bank of Soundings*, but with no success; On our return made the *Island* again; from thence stood Westward, and fell in with that of *Courutee*.

Courutee.

→ ground.

Although this *Island* is not the largest, *It* is the most valuable one, from its produce; The form of it is something like a *Last*; the NW side is defended by a *Reef*; the *Entrance* is on the NE End, but their boats go over many parts of the *Reef*: Where we → is the only *Spot* a *Vessel* can hold fast at, but a *Chain* is requisite, the bottom being a very sharp coral rock, which will cut a cable through in an instant: We each lost an → here, owing to the windward tides, which

Tides.

which sheered us about, and chafed that part of the Cable to which the Chain was bent; The tides run at times 2 knots $\frac{1}{2}$ hour, but very irregular; they never set upon any of the Islands, but always along them; so that there is no danger in being becalmed here.

Courutee.

The people at this Island seemed more affable than Those of Underoot; they brought us off fowls, turtle, coconuts, plaintains, limes, eggs, &c. making a very moderate demand for them; They also supplied us with some water, which was very good.

There are two remarkable species of the coconut on this Island; one has an outside husk, quite yellow, the Nut of which is remarkably rich and sweet, and the milk delicious; the other is the most valuable, for by thinning a little of the outside, the rest is eatable; and what are the fibres and coir in the common Coconut, is in this, well-tasted, and eats like a Turnip.*

The People, like the Others, were very inquisitive respecting our Vessels, and business about these Islands: our answers being not far from the truth, did not altogether please them; We enquired the names of all the Islands, and, by our Compass, they pointed how they lay of us, naming Seven Islands which were inhabited; Seuveli was not one of the number, as the People, from here, reside there, only in the fair Season.

From

* I have seen at Sooloo this kind of Coconut, but the shell was more like a Filbert than a Turnip; perhaps owing to different ages. A

Seuvellics.

From *Courutee* we stood SSW, and made the *Seuvellics*; from the *North End* of the *Northern Island*, we found a *Coral Spit*, upon which we \rightarrow ; being happy to find a Spot, to hold fast by, till the *Spring-tides* were over: The *Current* at this time, is very rapid; and upon this account, we could not venture with the *Hawk* to the Southward, so kept her as a *Station*, and went with the other Vessels to the Southward to examine the Extent of the reef; Both Vessels rowing oars, little danger could be apprehended.

Description of Seuvellics.

These Islands are very small, lying about 9 miles asunder, surrounded by a most tremendous Reef of black rocks, which, in many places, are above water, about the size of a *Ship's-bull*; The Reef extends about 5 miles to the Southward of the *Southern Island*: The Vessel being driven about with the Current, we could not get to the West side without losing much time; When at the South Extremity of the Reef, we could see the exact form of it, from our mast-head: During our stay at this *Island*, I went ashore with Messrs. *Procter*, and *White*, accompanied by a party of Sepoys and Europeans, to endeavour to wood and water the vessels;

Endeavour to get water.

We landed in a *Small Bay*, at the NW Point of the *Northern Island*: from there, struck directly into the *Island*, and at the distance of 100 yards from the *Beach*, we found, apparently, a very favourable Spot for a well, in a hollow, surrounded by six *Coconut-trees*. We began to work in the Center of them, and dug 7 feet before we came to the water; the first of which gave us encouragement

Seuvellics.

encouragement to continue our labour and form the well with a slope, to go down to fill it; as we cleared away the bottom, and went a little lower, we came to a *loose white sand*, resembling that on the beach, and to our mortification, found the water become *intolerably salt*: It *rose* and *fell* with the *tide*.

Having cut a quantity of *fire wood*, we were just embarking, when we perceived a boat, rowing a number of oars, coming from the other island towards us; When they were near our landing-place, they stopt rowing, shewing signs of fear; but on our waving a cloth, they approached, though still much frightened at the appearance of so many armed Strangers: When they were assured we had no hostile intentions against them, they became reconciled, and spoke freely to us in the Moor language, telling us, they belonged to *Courutee*, and had come to these *Islands* to *fish*, but would in a few days return; They lived chiefly on the *Southern Island*, which is better planted with *Coconuts*, their support: We shewed them the *well* we had dug, which pleased them much: they assured us, the water on the *other Islands*, was *not better* than *this*, and in order to convince us of the truth, they gave us some, which was in their boat, it really tasted more disagreeable than the water in our well; These People had boiled it, which gave it a nauseous sickly taste; We gave them some *rice*, which delighted them much, and in return, they presented us with a *turtle*, and *some fish*; the *former* is used by them, only for *bait*: They also gave us what *Coconuts* they had in their boat, but the *milk* was so very *salt*, that the People could not drink it; neither

neither could they eat the meat of them; It is very remarkable, in so short distance, these Islands should differ so much in the only produce.

The Northern *Sewvelli* affords nothing useful to Mankind, except *fire-wood*, which lyes in great plenty upon the Ground, dry and ready for putting in your boats; There are several very *large trees* on this *Island*, but so *soft*, that the *axe buried itself the first stroke*.^{*} The Northern *Island* is about $1\frac{1}{2}$ or 2 miles in circuit, surrounded with *breakers*, vide *Sketch*, excepting the *Channel*, where our boat went in; which seems the only *passage* to approach the *Southern Island*. The *rise* and *fall* of the *tide*, we found to be about 6 feet in *Spring-Tides*, and *high-water*, full and *change* at *irregular periods*, but rather *before noon*. Variation about 1° W, Our Observations in that, not much to be depended upon, as our *Compass* did not stand well. The *Southern Island* appears to form nearly a circle, as it seems the same size at every point of view; The People finding we were fond of the *turtle*, brought us several very *fine ones*; in return we gave them *rice*, which was very acceptable: They begged of us to stay till they caught more, but we could not comply with the request, as our *water* was drawing short.

Courutee.

From these *Islands*, we stood up to *Courutee* again, thinking to complete our water and live stock there; having

^{*} Probably this is the same wood found in the Islands near *Sooloo*, and which is substituted for *Cork* to stop bottles. D

Difference of the behaviour
of the Inhabitants.

having hopes of doing so, from the former affability of the inhabitants. We anchored nearly in our old situation, and to our surprise, were there part of two days, without a boat coming near us; notwithstanding our firing guns repeatedly; As we wished to know the cause of this backwardness, I sent Mr. *Wedgebrough* in the *Pattimar*, to know the reason of their behaviour: He anchored the *Pattimar* close to the *outside* of the *Reef*, and landed in our boat; As he approached the shoar, they collected in a large body to receive him; Being conscious we perceived their alarm, they affected a distant civility, which was very conspicuous to Mr. *Wedgebrough*, who did all in his power to regain their confidence and friendship, assuring them, our business among these *Islands*, was nothing more than to know the true and exact situation of them, and particularly to cultivate their friendship, which we hoped to do, and requested of them to go without fear on board of any *English Vessel*, that might pass that way: They replied, they had never seen a Vessel going backwards and forwards among their *Islands* before; that they could not help thinking, we had some bad design; particularly as they heard, we were on the eve of disputing with *Tippo*; and the *Queen of Cannanore* being His ally, they had some reason to be suspicious of us; lastly, that if the *Bibee*, or *Queen*, to whom the *Island* belongs, knew of their supplying us with any thing, it would cost the *Karia-Kar*, or *Governor*, his life: We again assured them, we had no hostile intentions, and at last, they agreed to give us water, if we sent our casks for it, they having nothing

H

but

but open boats, and those not sufficiently tight ; They would also collect what *poultry* they could by to-morrow for us, as well as any other production of the *Island* : It blowing fresh in the night, and each of us losing an \leftrightarrow , of which we had no more to spare, thought *watering* here, with our own casks and boats, would be attended with a considerable loss of time, and many other inconveniencies ; we therefore determined to stand in for the *Coast* again ; which circumstance, no doubt, was pleasing to the people of the *Island*, whose apparent friendship was more influenced by fear than love : Their defence is in their situation, by Nature, so they never provide themselves with weapons of any kind, or perhaps it is the policy of the *Bibee* to keep arms from them : I am well assured the People of our two vessels, might have possessed themselves with any *Island* we had seen.

Back to Tellicherry.

In our way to *Tellicherry*, we sounded as usual, regular between the two vessels ; hoping to strike *Eliculpena Bank*, as we were certain of its existence from the report of the *Islanders* ; But to our mortification we missed it.

When we were a-breast of *Underoot*, the *Pattimar* was sent with some *presents* and *rice*, to procure *stock* ; and to tell them, we would call at their *Island* again, this we thought might prevent any treachery to the Crew of the *Pattimar* : She succeeded, and returned to *Tellicherry* the next day, with a dozen of *fine turtle*, and 5 or 6 dozen of *fowls*, which proved very acceptable, as *poultry* was not procurable at *Tellicherry*.

Having

Traverse for the
Hamilton Bank.

Soundings on
Eliculpena.

Eliculpena Bank.

Having compleated our *water* and *provisions*, we left *Tellicherry*, and coasted along, NWestward, to *Mount Dilla*, into 4 fathoms, which depth is clear of danger; From the *Mount* we stood off, in quest of the *Hamilton Rock*, traversing the Extremity of *Soundings* for several days, but without success; We gave up this pursuit, and stood down, for the last time, to search for *Eliculpena*; with intentions to keep well to the Westward, and then to stand in, between the two former tracks: By following this plan we accidentally fell in with the *Bank*: I say, accidentally, for we came upon *It* the first hour we bore in for the *Coast*: It astonished us, to find *Eliculpena* so far off the *Land*; Soon as we found ourselves in *shoal water*, we came to \rightarrow , and made the signal for the *Experiment* to traverse to the Southward, and an officer went in the *Pattimar*, to examine the West Side of the *Bank*: Employed part of two days in traversing this *Bank*, from one extreme to the other; the distance, measured by *Sound* and *Altitudes*: The least water we found on this *Bank* was $6\frac{1}{2}$ fathoms, but by the *large hollow swell* upon *It*, I am convinced that the *Sea* must *break* here in the SW Monsoon. Having been several days from *Tellicherry*, we knew not, but our *Chronometer* might have altered its rate; therefore, to put the *situation* of the *Bank* beyond a doubt, stood for *Tellicherry*, and placed *Eliculpena* by the difference of one day's run: It is considerably further to the Westward, than laid down in any of the old Charts; for we make it $1^{\circ} 30'$ W of *Tellicherry*: This *Shoal* has *sharp coral rocks* all over; We came to \rightarrow with a cable to our \rightarrow , the chain being unbent, and in 5 minutes, the buoy rope was cut, although not bent to the crown, but to the flank of
the

the \rightarrow ; In the space of two hours, when we wanted to shift the \rightarrow , with one bent to a chain, we found the end of the cable only came up, and it is 10 chances to 1, that upon these *Banks* you never recover an \rightarrow .

Stretch to the Westward.

Pettie.

The 21st of April 1790, we left *Tellicherry* for the last time, and as our small Vessels would make tedious work, in turning up the *Coast* against the strong NWesters, stood off, and made the *Island Amené*, as $\frac{1}{2}$ Log; Struck *Soundings* on the *Bank* which joins it with *Pettie*, traversed across the *Bank*, and determined its breadth; then stood close to *Pettie*, within 4 or 500 yards, and saw all over it from our mainmast head; *This Island*, or rather *Sand Bank*, is not more than 6 feet higher than the level of the *Sea*, and the whole surface not more than two acres; On the East Side is a *Black Rock*, which, at first, we took for a *wrecked vessel*: The *birds* about this *Island* are really surprizing, they appear at a distance like a *cloud* of *smoak*, or a *vapour* arising from the *Sand*: We could see *Courutee* from here, bearing about SSE $\frac{1}{2}$ E. There is not a *shrub*, or *bush* of any kind on *Pettie*, and without doubt, this *Bank* must be overflowed in the SW Monsoon. The *turtle* here, I think, must be numerous. In every probability, *this* is the *same Island* seen by the *London*, &c. in 1620, and the *Soundings*, upon the *Bank Northward*, confirms it, that *Amené* was the other *Island* or *Islands*.^a

From

^a Capt. Swan's Chart makes this *doubtful*, for the *Islands* he afterwards saw, are very nearly NNE from the *Sand Bank* and *Amené* by Lieut. M^cCluer, bears NEbN from *Pettie*, which without doubt was the *Sand Bank* seen in 1620. Some Drafts describe an *Island* named *Germe* hereabout, which, although in a more *Southerly* direction from *Pettie*, may be what Lieutenant M^cCluer names *Amené*. D

Aucuttee. From *Pettie*, we stood Westward off and on, in the night; in the morning made the *Islands Aucuttee*; also the other *two* to the NE, viz. *Bingaro* and *Tingaro*: these *Names* are the *same* as *Cornwall* gives; they were given us by those *Islanders*, with whom we had intercourse; The *reefs* off *these*, appear to be on the *West Side*, which is the case with most of them: *Aucuttee* seems well planted with *Coconut-trees*, and *well inhabited*, as we saw many of the *People* crossing from the *large Island* to the *small One*: We hoisted our colours, but they took no notice of us; No *boats* were perceived among them; perhaps they might have been *within* the Reef on the *West Side*. After determining the exact Latitude and Longitude of *these Islands*, we stood to the Westward, where we met with fine serene Weather and light Winds, chiefly Northerly; We took every advantage of the change of breezes, standing to the Westward, when we could do it without losing our Northing: Upon the whole, the Passage was an agreeable one, as we had no considerable *Current* against us, or any *squally blowing weather*, which, in *this month*, prevails upon the *Coast*. We did not go farther West than 7° from *Tellicherry*, but, on the same occasion, I would endeavour to get 10° Westing; by which means, I might expect fresher Winds, and more Westerly, to stand to the Northward with.

standing to the Westward.

When we got into $14^{\circ} 40' N$, I intended to traverse for the *Island*, said to have been seen by a *French Ship*; but the Season being too far advanced, and our *water*

I

a little

a little *short*, we stood for *Bombay*: This *Island* may be doubted to exist, as the supposed Situation of it is exactly in the track of the Vessels, which stand off from *Goa* in the months of March and April: had there been any thing of the kind, we must have discovered it long ago: I imagine Captain *Forrest* was wrong informed.

On our return to *Bombay*, the rate allowed our Chronometer, has only altered our difference of Longitude from *Tellicherry*, 1 mile, and some seconds, which is scarcely worth notice.

Our Observations for the Longitude at *Bancoot*, corresponding with those taken down the *Coast*, must place the Longitude of *Bombay* past a doubt: to prove these Observations, all the Europe Ships of this season, have made *Bombay* to lye within a few miles of the 73^d degree. Captain *Welladvice* and Mr. *Macnamara* make the Longitude of *Bombay*, within a mile of our observations.

The foregoing *Remarks* will appear very irregular to the *Reader*, as they follow the track of the Vessels, and fly from one part of the *Coast* to another; however, this could not be avoided, as we were obligated to take every advantage of the Winds and Weather: I expected to finish the work by the next season, and then to arrange the whole *Description* in proper order; but this is prevented by work of more importance set on foot; however, I hope to complete it at some future period.

The

The *Tracks* are laid down corrected for Currents, &c. by *Observations* for the Latitude at Noon, and Longitude & Chronometer in the Evenings, on which I place more confidence, than those in the Morning: The *conclusion* of *each day* is marked with N, and the *time* with T, and the day of the month: Where we have *Soundings*, the *tracks* are laid down as run & Log, but otherwise, they are frequently compounded, or several brought into one; All *Soundings* taken with an *armed lead*, and the *quality* of the *ground*, specified, in the *Log-book*, with *symbols*, or *Letters*: The *distances* in the *Log-book*, are reckoned in *Knots*, and *tenths* of a *Knot*; being a ready way for taking out the difference of Latitude and Departure to a fraction of a mile; The *Courses* are put down, corrected by every Officer, according to his judgement during his Watch; which we found to be more correct than making allowances the next day.

I regret our not being able to make more frequent *Observations* for the *Variation*. Our Vessels being so small, that it was seldom we could put any dependance on our *Compasses*; the motion being too great for them to stand to any nicety.

The

* The *Tracks* making the *Soundings* indistinct I have omitted *them*, and shall add a *Chart*, on a *smaller scale*, with the *Tracks*, to shew the general course of the *Voyage*. D

The *Views* were not taken by a *professional Draughtsman*, therefore, the embellishments must be excused; however the *Outlines* are very correct.

Thus have I described our last Season's Work. I have advertised in the *Bombay Gazette*, that *any Remarks* made on the *Malabar Coast*, during my absence, will be thankfully received by the *Marine Secretary*.

John M^cCluer.

A TABLE

A T A B L E
of
LATITUDES and LONGITUDES,
From a SURVEY.

Names of Places and Points.	Lat. N°	Long. from Bombay Castle.	Long. from Greenwich.
1. Diu Head . . .	20. 42. 0	1. 51. 0W	71. 5. 33E
2. Diu Castle . . .	20. 43. 15	1. 43. 0	71. 13. 33
3. Nowabunder, Entrance .	20. 45. 30	1. 39. 30	71. 17. 3
4. Semer Fort : Portuguese	20. 47. 0	1. 32. 50	71. 23. 43
5. Radjapore . . .	20. 47. 30	1. 30. 0	71. 26. 33
6. Jaffrabat Fort . . .	20. 52. 50	1. 18. 0	71. 38. 33
7. Searbett Island, Center	20. 56. 0	1. 12. 0	71. 44. 33
8. Chanch River, Entrance	20. 57. 30	1. 12. 0	71. 44. 33
9. Mowah Bar . . .	21. 1. 40	0. 57. 0	71. 59. 33
10. Cutpore Pagoda . . .	21. 3. 30	0. 54. 0	72. 2. 33
11. Wagnaghur Creek, Entrance	21. 3. 40	0. 52. 30	72. 4. 3
12. Jaunmaire Fort . . .	21. 10. 30	0. 42. 0	72. 14. 33
13. Goapnat Pagoda, on Point	21. 12. 30	0. 39. 20	72. 17. 13
14. Sultanpore Creek . . .	21. 19. 30	0. 39. 0	72. 17. 33
15. Tallijah Hill . . .	21. 22. 0	0. 43. 0	72. 13. 33
16. Settrujah Hill . . .	21. 30. 0	0. 57. 0	71. 59. 33
17. Kutherpore Village . . .	21. 29. 15	0. 34. 0	72. 22. 33
18. Allung Village . . .	21. 31. 40	0. 33. 30	72. 23. 3
19. Gogo Town . . .	21. 40. 30	0. 33. 30	72. 23. 3
20. Baunaghur Creek . . .	21. 48. 0	0. 34. 0	72. 22. 33
21. Broach Point . . .	21. 38. 30	0. 11. 0	72. 23. 3
22. Peram Island, Center . . .	21. 35. 0	0. 29. 0	72. 22. 33
23. Bogway Creek . . .	21. 23. 40	0. 6. 0	72. 45. 33
24. Vauxe's Tomb . . .	21. 4. 30	0. 5. 40	72. 27. 33
25. Surat Castle . . .	21. 11. 0	0. 8. 0E	72. 50. 33

K

26. Domus

LATITUDES and LONGITUDES of PLACES.

Names of Places and Points.	Lat. N°	Long. from Bombay Castle.	Long. from Greenwich.
26. Domus	21. 3. 0	0. 2. 30W	72. 54. 3E
27. Falfe River	20. 59. 40	0. 2. 30	72. 54. 3
28. Nunfaree River, Entrance	20. 55. 0	0. 0. 0	72. 56. 30*
29. Gundavee River, Entrance	20. 42. 0	0. 6. 30E	73. 3. 3
30. Bulfaur River, Entrance	20. 35. 0	0. 9. 0	73. 5. 33
31. Poneira Hill	20. 30. 0	0. 12. 30	73. 9. 3
32. Omerfary	20. 29. 0	0. 9. 0	73. 5. 33
33. Collack	20. 25. 30	0. 8. 20	73. 4. 53
34. Damoan Fort	20. 22. 0	0. 8. 20	73. 4. 53
35. Omergon Tower	20. 10. 30	0. 2. 0	72. 58. 33
36. St. John's, Body of the Hill	20. 2. 0	0. 7. 0	73. 3. 33
37. Danno Entrance	19. 56. 0	0. 7. 0W	72. 49. 33
38. Terraport Fort	19. 51. 0	0. 7. 0	72. 49. 33
39. Sautputty Bar	19. 45. 0	0. 5. 30	72. 51. 3
40. Kilmeymahim	19. 35. 0	0. 3. 0	72. 53. 33
41. Dantarah Point	19. 32. 0	0. 3. 30	72. 53. 3
42. Arnoll Island, Center	19. 28. 0	0. 3. 30	72. 53. 3
43. Bassein Fort	19. 19. 0	0. 2. 0E	72. 58. 33
44. Daravie Fort	19. 16. 40	0. 0. 30W	72. 56. 3
45. Manorah Church	19. 11. 30	0. 2. 0	72. 54. 33
46. Verfovah Fort	19. 7. 30	0. 1. 30	72. 55. 3
47. Mahim Fort	19. 1. 50	0. 0. 0	72. 56. 30*
48. Bombay Castle	18. 56. 0	0. 0. 0	72. 56. 33
49. The Light-House	18. 53. 0	0. 1. 30	72. 55. 3
50. Tull Point	18. 48. 0	0. 3. 0E	72. 59. 33
51. Kennery Island	18. 43. 30	0. 1. 30W	72. 55. 3
52. Coullaba Island	18. 37. 20	0. 2. 0E	72. 58. 33
53. Choull Fort	18. 32. 0	0. 5. 30	73. 2. 3
54. Naudghaum Creek	18. 20. 30	0. 5. 0	73. 1. 33
55. Gingera Fort	18. 16. 30	0. 8. 0	73. 4. 33
56. Cafferah Fort	18. 17. 0	0. 6. 0	73. 2. 33
57. Comrah Point	18. 10. 30	0. 6. 0	73. 2. 33
58. Severdon Inlet, Entrance	18. 0. 10	0. 10. 30	73. 7. 3

59. Harriifa

* So in the original. *A*

LATITUDES and LONGITUDES of PLACES.

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Names of Places and Points.	Lat. N°	Long. from Bombay Castle.	Long. from Greenwich.
59. Harrissa Hill . . .	17. 58. 0	0. 11. 0E	73. 7. 33E
60. Fort Victoria . . .	17. 56. 40	0. 12. 0	73. 8. 33
61. Kelsey Village . . .	17. 53. 0	0. 13. 0	73. 9. 33
62. Severndroog Island . . .	17. 47. 30	0. 14. 30	73. 10. 3
63. Anjenweel Fort . . .	17. 34. 30	0. 18. 0	73. 14. 33
64. Boria, or Cape Debs . . .	17. 25. 0	0. 18. 30	73. 15. 3
65. Zyghur Fort . . .	17. 16. 0	0. 23. 0	73. 19. 33
66. Rattney Garie Fort . . .	17. 2. 0	0. 25. 0	73. 21. 33
67. Rajpoor . . .	16. 47. 0	0. 28. 0	73. 24. 33
68. Gariah Fort . . .	16. 32. 0	0. 27. 30	73. 24. 3
69. D ^o Flag-Staff . . .	16. 31. 0	0. 27. 30	73. 24. 3
70. Dughur Fort . . .	16. 23. 0	0. 33. 30	73. 30. 3
71. Atchera, Entrance . . .	16. 11. 0	0. 37. 0	73. 33. 33
72. Melundy Fort * . . .	16. 3. 0	0. 39. 0	73. 35. 33
73. Newtee Point and Fort . . .	15. 56. 0	0. 41. 30	73. 38. 3
74. Southern Burnt Island . . .	15. 51. 40	0. 39. 30	73. 36. 3
75. Rary Fort . . .	15. 44. 0	0. 51. 0	73. 47. 33
76. Chiracole . . .	15. 41. 40	0. 52. 30	73. 49. 3
77. Chapra . . .	15. 36. 0	0. 54. 0	73. 50. 33
78. Aguada Point . . .	15. 29. 30	0. 55. 30	73. 52. 3
79. Southern St. George's Island . . .	15. 22. 0	0. 55. 30	73. 52. 3
80. Salfet River, Entrance . . .	15. 7. 0	1. 9. 0	74. 5. 33
81. Cape Ramas . . .	15. 5. 0	1. 7. 30	74. 4. 3
82. Sudashaghur Fort . . .	14. 49. 30	1. 20. 0	74. 16. 33
83. Carwar Head . . .	14. 47. 0	1. 18. 0	74. 14. 33
84. Anjadivé Island, Center . . .	14. 44. 0	1. 18. 30	74. 15. 3
85. Mount Dilla Fort . . .	11. 59. 30	2. 36. 0	75. 32. 33
86. Cannanore Point . . .	11. 51. 0	2. 46. 0	75. 42. 33
87. Tellicherry Fort . . .	11. 44. 0	2. 54. 0	75. 50. 33
88. Mahie Fort . . .	11. 41. 10	2. 56. 0	75. 52. 33
89. Sacrifice Rock . . .	11. 30. 30	2. 55. 30	75. 52. 3
90. Cochin Fort . . .	9. 56. 30	3. 38. 0	76. 34. 33
91. Iviker Entrance . . .	8. 54. 0	3. 58. 0	76. 54. 33

92. Quiloan

* Lieut. M^cCluer calls it *Malundy*, but his *Chart* agrees with Commodore *Watson's* PLAN in calling it *Melundy*. *A*

LATITUDES and LONGITUDES of PLACES.

Names of Places and Points.	Lat. N°	Long. from Bombay Castle.	Long. from Greenwich.
92. Quiloan Fort . . .	8. 51. 30	3. 58. 20E	76. 54. 53E
93. Anjengo Fort . . .	8. 39. 20	4. 10. 0	77. 6. 33
94. Minicoy Island, South End	8. 15. 50	0. 25. 30	73. 22. 3
95. D° d° North End	8. 21. 10	0. 30. 30	73. 27. 3
96. †Seuvellic South Island, Center	9. 59. 0	0. 22. 0W	72. 34. 33
97. D° North Island, Center	10. 7. 0	0. 18. 0	72. 38. 33
98. Kalpeny, South End .	10. 4. 0	1. 6. 30E	74. 3. 3
99. D° North End .	10. 10. 30	1. 8. 0	74. 4. 33
100. Underoot Island, Center .	10. 48. 30	1. 4. 30	74. 1. 3
101. Courutee Island, Center .	10. 34. 0	0. 1. 15W	72. 55. 18
102. Amené Island, South End	11. 6. 0	0. 6. 0E	73. 2. 33
103. Pettie, * sandy Island .	10. 47. 50	0. 8. 20W	72. 48. 13
104. Aucuttee, North End .	10. 53. 0	0. 28. 0	72. 28. 33
105. D° South End .	10. 49. 0	0. 30. 20	72. 26. 13
106. Bingaro, South End .	10. 55. 30	0. 24. 0	72. 32. 33
107. Tingaro, South End .	10. 56. 0	0. 21. 30	72. 35. 3
108. Eliculpena Shoal, Center	11. 15. 0	1. 25. 0E	74. 21. 33
109. Angria's Bank, North End	16. 38. 0	0. 50. 0W	72. 6. 33
110. D° d° South End	16. 18. 0	0. 50. 0	72. 6. 33

John M'Cluer.

† In the *Plan* it is named *Seubeli*. *D*

* It is here spelt *Pettie*, but repeatedly in the *Description*; *Pettie*; in the Chart he calls it *Pittie*. *D*